ABSTRACT OF THE DISCLOSURE

Provided is a multi-element polycrystal formed by cooling a melt containing multiple components while controlling a cooling rate. The multi-element polycrystal is a mixed crystal essentially formed of elements Si and Ge having different absorption wavelength ranges and having a composition represented by Si_{1-X}Ge_X, in which Ge absorbs light over a longer range of wavelength from a shorter to longer wavelength range than Si, each of the crystal grains of the mixed crystal has a matrix having a plurality of discrete regions dispersed therein, the average matrix composition is represented by $Si_{1-x_1}Ge_{x_1}$ and the average composition of the discrete regions is represented by $Si_{1-x_2}Ge_{x_2}$ where X1 < X < X2. Also, provided is a solar-cell polycrystal satisfying high light-absorption efficiency and low cost by using the multi-element polycrystal, a solar cell and a method of manufacturing the solar cell.

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